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## Revealing Mechanism of Self-Regulation in Children and Minors in Institutional Care

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### Abstract

In their research, the authors focused on generating mechanisms involved in and affecting the process of self-regulation in children and minors living in institutional care, namely in children's homes. The aim of this research was to uncover/reveal the processes of self-regulation that shape an individual's interaction with the environment and their "confrontation" with the risk factors, i.e. to reveal the mechanisms regulating emotions, cognition, behaviour and attention. The researchers used a system of inductive methods of qualitative research, i.e. coding procedures of grounded theory (Strauss, Corbin, 1998). As their research technique they chose the focus group (Morgan, 1997), in selected children's home in the Zlín Region (in the Czech Republic). The participants were seven respondents aged 12 to 16 years. The data were transcribed and processed using open, axial and selective coding. Via open coding, 74 codes, later merged into 19 categories were abstracted and dimensionalised. Two process models - regulation of emotion and of cognition crystallised from the categories, merging into an important factor of motivation. Subsequently, a cyclic model of the influence of motivation on success was prepared. In conclusion, we have uncovered a hierarchical model of self-regulated behaviour. We found that the staff plays a key role in motivating children and adolescents living in residential care facilities. Our findings point towards the theory of replacing intrinsic motivation by extrinsic motivation. Therefore we deem it necessary to apply a holistic approach aimed at developing social and emotional competencies, which is the basis for self-regulation of behaviour.

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*Keyword:* self-regulation; children; minors; institutional care; total institutions.

### 1. Theoretical background

One of the significant factors in preventing risk behaviour of an individual is self-regulation of his/her behaviour. Each person, throughout their life, consciously rectifies and modifies their behaviour according to the feedback and stimuli received from their social environment (Vávrová, 2010). We speak about a self-regulated conduct/behaviour which could be defined as an ability to flexibly activate, monitor, inhibit, persevere and/or adapt one's behaviour, attention, emotions and cognitive strategies in response to direction from internal cues,

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environmental stimuli and feedback from others, in an attempt to attain personally relevant goals (Moilanen, 2007).

We assume that by understanding the relation between self-regulation and risk behaviour of an individual we may achieve a desired change in their behaviour. A research into the relations between self-regulation and risk behaviour is carried out mainly in abroad, whereas similar studies are absent in the Czech Republic. The significance of self-regulation in children and minors when dealing with risk behaviour has not yet been explained. Based on the above-listed, we are primarily interested in the mechanisms of self-regulation and how they are reflected in behaviour of children and minors in the institutional environment.

After the end of the 90s of the last century (i.e. after the Velvet Revolution in 1989) the discussion about deinstitutionalisation of institutional care for children and youth was initiated in the Czech Republic. Experts have been alarmed by the high numbers of children and youth in institutions. These institutions fall within the following fields: health care (infant homes and children's homes up to 3 years of age, currently in the process of transformation), education (diagnostic institutions, children's homes, children's homes with school and educational facilities for the provision of institutional and juvenile correctional education/institutional treatment institutes – term used by The Ministry of Education, Youth and Sports) and social area (homes for people with disabilities).

As part of the research, we focused on the process of self-regulation in children and minors in residential educational facilities. Children and minors are placed there in case of court-ordered institutional education, protective care or court-ordered interim measures (§ 1, paragraph 1 of Act No. 109 / 2002 Coll.). A diagnostic facility is an exception as it also provides care to children whose placement order was issued due to behavioural disorders and was requested by their legal guardians (however this option shall be revoked by a future amendment of the Act No. 109/2002 on the provision of institutional education or protective education at school facilities and on preventative educational care at school facilities).

The first part of the research focused on children's homes, as one of the following types of institutional educational facilities: a diagnostic facility, children's home, children's home and school and educational institution (§ 2 paragraph 1 of Act No. 109/2002 Coll.). In accordance with Goffman the institutions and facilities above may be referred to as total institutions. Goffman (2007, pp. 4-7) defines a total institution as a place that serves as both, residence and workplace, where a large number of similarly situated individuals are isolated from the outer world for a long period of time and where, from the outside perspective, they lead a closed off and a formally managed way of life. In children and minors living in institutions the symptoms of institutionalization may develop, i.e. they become dependent on the organisation which was to help at first. Goffman (2007) describes the process of institutionalisation as a response to bureaucratic structures and processes as a deadening process of total institutions. Therefore, in line with Goffman, we can frequently observe the symptoms of institutionalisation in these groups of children and minors which is a major obstacle to their functional self-regulation of behaviour and their subsequent return in the natural social environment.

The issue of institutionalisation has been frequently debated in the Czech Republic at present. Especially since there have been significant legal changes in the related acts as of 1 January 2013. Namely, the Act No. 359/1999 Coll., on social and legal protection of children, accentuates the mutual right of parents and children on upbringing and child care (§ 5 of Act No. 359/1999 Coll.). The Act no 359/1999 on social and legal protection of children also supports professionalisation of foster care, which is preferred to institutional care. According to the Ombudsman, who is actively involved in observing human rights in institutions for children and minors, *"every month that a child spends in a residential facility may have a negative impact on it in terms of its further development"* (Seminar on protection of vulnerable children and their families, 2013). Matějček, Bubleová, Kovařík (1996) believe that children brought up in a long-term institutional care may in older age show certain deviations from the norm in terms of personality development and their social inclusion.

Therefore, the research appears to be rather topical in the context of the ongoing changes when self-regulation of behaviour, or its deficit was identified in relation to a number of risk areas such as impulsive behaviour, symptoms of anxiety, depression, suicidal behaviour, addictive behaviour, etc. (Endler, Kocovski, 2005; Maes,

Gebhardt, 2005). Low levels of self-regulation are generally associated with a higher degree of externalising and internalising of problem behaviour in childhood and adolescence (Eisenberg et al. 2005; Tangney et al. 2004). We believe that self-regulation plays a key role in the prevention and elimination of risk behaviour in children and minors. For this reason, we focus on the target group, which can be described as vulnerable. We anticipate that the level (or deficit) of self-regulation in children and adolescents in institutional care is not only determined by the institutional environment in which they currently live, but primarily by the social environment they lived in before the placement in institutional or protective care.

## 2. Research methodology

Within the research scope, we focused on self-regulation of behaviour in children and minors living in residential educational institutions – i.e. children's homes. According to the Czech Statistical Office on October 31, 2012 there were 220 educational facilities for institutional and protective care (out of this number 147 children's homes) in which the total of 6,941 children and adolescents were placed (4442 of these children and minors lived in children's homes) (Schools and Educational Facilities 2012/2013. Tab. 33 Facilities for institutional and protective educational care by founder and institutions, 2013).

In the Zlín Region territory, i.e. the research area, there are currently 8 children's homes with a total capacity of 182. Children's homes, as the places of the research implementation, were chosen deliberately for the following reasons: children and youth aged 3 to 18 years are placed here, as well as teenage mothers together with their babies. Moreover, it is a co-educational facility (as opposed to educational institutions for the provision of institutional and juvenile correctional education/ institutional treatment institutes). A focus group has been drawn and thus selected randomly from the eight existing facilities. The topic of the focus group in hand was self-regulation.

The basic *aim* of the research ***was to generate mechanisms that are involved in and which affect the process of self-regulation in children and adolescents living in children's homes.*** We concentrated on the processes of self-regulation that shape an individual's interaction with the environment and the "encounter" with risk factors, i.e. the process of detection of mechanism in regulating emotions, cognition, behaviour and attention in children and adolescents. For this purpose, the system of inductive methods of ***qualitative research was used, i.e. coding procedures of grounded theory.*** The concept of processuality which is essential in grounded theory served as the base. We wanted to capture the dynamic process of self-regulation (not a static moment of its state) and then construct a theory of relations that constitute its essence.

The participants in focus groups, which took place March 13, 2013, were selected on a voluntary basis, the only requirement being age (11 and over) in order to ensure understanding of the discussion areas. The participants in the focus groups who were involved were 4 boys and 3 girls aged 12 to 16 years. It was a semi-structured focus group with the duration of 71 minutes. The moderator and assistant moderator of the focus group (Miovský, p 177) prepared a script and a detailed strategy to manage the group, including the areas and model questions. The focus of the discussion was aimed at four areas: the functioning mechanisms of self-regulation of emotions, cognition, behaviour and attention. The course of the focus group was then divided into several phases, namely the opening, introductory discussion, motivation of the participants, the core discussion and conclusion.

## 3. Data analysis

The data obtained from the focus groups were subsequently reviewed several times and literally transcribed. We then proceeded to analyse the transcribed text, notes and record sheets, in which we recorded interesting moments. The text was analysed by using the techniques of *open, axial and selective coding*. As part of the analysis or coding, we reviewed the text repeatedly assigning codes (concepts) to the same semantic units. 74 codes were abstracted during the process of open coding. In the process of categorisation (the process of grouping concepts that seemed to relate to the same phenomenon) the 74 existing codes merged into 19

categories arranged in four specified areas – regulation of emotions, cognition, behaviour and attention (see Table 1). The presented categories were created based on the codes common for individual data fragments recorded in the transcribed text. The category names are more abstract and have a certain conceptual range that determines which groups of concepts or subcategories belong there.

**Table 1** List of codes and categories

CODES (CONCEPTS)	CATEGORIES (VARIABLES)	CATEGORY QUALITIES AND THEIR DIMENSIONALISATION
1. area – REGULATION OF EMOTIONS (6, 23)		
Slander (gossiping behind the "back")	Triggers of emotions	Openess (latent – manifested)
Open conflict (insults, ridiculing)		Degree (high – low)
Lying (twisting the reality)		
Racism		
Inner discomfort (physical)	Experiencing emotions	Intensity (low –high)
Outer discomfort (nervousness, irritability)		Manner (inner – outer)
Angry with myself	Manifestations of emotions	Latency (hidden – open)
Angry with others		Intensity (low –high)
I know what is good	Awareness of emotions	Degree of awareness (low– high)
I think about consequences		
I try to relax (music, cigarette)	Controlling emotions	Degree (low – high)
Distracting myself (by another activity that I enjoy - horses, sport)		
Escape from reality (book, film)		
Change of place (I leave)		
Suppressing anger		
Ignoring others	Reflection of emotions in behaviour	Degree (low – high)
Lack of communicatin (silence)		Impulsivity (low – high)
Holding emotions in (I do not show emotions on the outside)	SUBCATEGORY Passive strategy	Duration (short-term – long-term)
Waiting (until the situation resolves itself)		
Open talk/confrontation	Reflection of emotions in behaviour	Degree (low – high)
Fight – physical attack		Impulsivity (low – high)
Insults	SUBCATEGORY Active strategy	Duration (short-term – long-term)
Outburst of anger (“I lose it”, yell)		
2. area – REGULATION OF COGNITION (7, 25)		
Studies	Goal setting	Reality (low – high)
Personal life		Time horizon (short-term – long-term)
Hobbies and interests		
Gaining material things		
Thinking about life	Self-reflection	Degree (low – high)
I did not care about it until now		
Not realising the consequences for life		
I will quit (smoking)	Decision	Effect on life (major – minor)
I will start (to study, be more economic)		Feasibility (abstract – concrete)
Determining milestone (new start in life)		
Already doing it (training, learning)	Plan implementation	Timing (present– future)
Not doing anything (I cannot)		Degree of own activity (low – high)
Will do in the future (when)		
External support (Children’s homes worker, a person close, child)	Supports	Functionality (low– high)
Internal support / motivation (sense of success, I did not want to be a "fool"		
Sadness	Experiencing failure	Intensity (low – high)

Irritation		Impact (positive – negative)
Why me?		
Where did I go wrong?		
I will talk about it		
I will fix it	Overcoming failure	Effectiveness (low – high)
I will try harder		Impact (positive – negative)
I will do it differently		
I will fulfil conditions (clean my room)		
I will persevere		
3. area – REGULATION OF BEHAVIOUR (5, 19)		
Smoking	Identification of problem behaviour	Degree of problemacity (low – high)
Alcohol consumption		
Drug abuse		
Theft		
Vulgar behaviour		
Physical attack of others		
Failing school		
Juvie	Awareness of sanctions	Degree of threat (weak –strong)
Jail		
Probation		
Showing off	Identification of reasons of problem behaviour	Causes (internal – external)
Social pressure		
Occasion		
Prior to	Awareness of own problem behaviour	Time horizon (before – after)
After		
Not at all		
Back away	Change of behaviour	Difficulty (slight – high)
Need for external support (extrinsic motivation)		Motivation (intrinsic – extrinsic)
I cannot take it (makes me nervous)		
4. area – REGULATION OF ATTENTION (1, 7)		
Someone else does it instead of me	Fulfilling of (unpleasant) obligations	Motivation (intrinsic – extrinsic)
I postpone it for later		
I keep digressing (during a task)		
	SUBCATEGORY	
	Passive strategy	
I do not think about it and do it	Fulfilling of (unpleasant) obligations	Motivation (intrinsic – extrinsic)
I do it, becuse I am aware of sanctions		
I do as oon as possible to have it done		
I do it under the threat of sanctions	SUBCATEGORY	
	Active strategy	

Source: Research in children's home, March 2013.

Via open coding, we divided the data and determined categories / sub-categories, their properties and possible position on the dimensional scales. Due to the limited scope of the paper, we do not provide authentic data fragments.

The data obtained via open coding were rearranged again in the axial coding and a paradigmatic model was created allowing us to sort categories according to the circumstances of their origin and mutual relations, starting with the causes and ending with consequences of their existence. During the open coding, 19 different categories were designed. Some of them belong among phenomena, others emphasise the conditions related to these phenomena, while others refer to behavioural strategy and strategies applied to respond to that phenomenon. There are also categories referring to the consequences of actions in relation to the phenomenon analysed. Such a procedure contributes to a deeper knowledge and understanding of the relations between categories. In line with the above mentioned, the following categories were created (see Table 2).

**Table 2** Paradigm model of axial coding

A	B	C	D	E	F
CAUSAL CONDITIONS	PHENOMENON	CONTEXT	INTERVENING (INFLUENCING) CONDITIONS	ACTING STRATEGIES AND INTERACTION	CONSEQUENCES
Triggers of emotions (1)*	<b>SELF-REGULATION</b> Central category	Experiencing emotions (1) Self-reflexion (2) Identification of problem behaviour (3) Identification of problem behaviour reasons (3)	Awareness of emotions (1) Supports/pillars (2) Experiencing failure (2) Awareness of sanctions (3) Awareness of one's own problem behaviour (3)	Coping with emotions (1) Goal setting (2) Decision (2) Plan implementation (2) Overcoming failure (2) Behaviour change (3) Fulfilling (unpleasant) obligations (4)	Expressing emotions (1) Reflection of emotions in behaviour (1)

\* The number in brackets following the category name indicates the area the category belongs in: (1) regulation of emotions, (2) regulation of cognition, (3) regulation of behaviour, and (4) regulation of attention

Source: Research in children's home, March 2013.

Using axial coding, we have created the basis for selective coding and after a thorough analysis of the data, we began the process of integration of the acquired categories in grounded theory.

#### 4. Generating new theory

The newly obtained categories with their dimensions served as the basic building blocks. Furthermore, the principles of selective coding were followed. We have gradually build the frame of the phenomenon, describing the mechanisms observed and involved in the process of influencing self-regulation in children and adolescents living in children's homes. Our attention was focused on the processes of self-regulation that shape an individual's interaction with the environment and his/her "encounters" with the risk factors, i.e. detection of the mechanism regulating emotions, cognition, behaviour and attention.

Each category was put in relation with others on the dimensional level and then put in relation to the central category, as the general coding paradigm suggests. Two process models were created based on the relations of the categories: a model of emotion regulation (see Figure 1) and a model of cognition regulation (see Figure 2).

**Figure 1** A process model of emotion regulation

In connection with the abstracted model, we may conclude that the degree of self-regulation of emotions (the level of their control) directly influences the behaviour of an individual. Being aware of one's own emotions is a key element in this process. One can only control their emotions through the awareness of these emotions. If enough emphasis is placed on controlling emotions in children and youth in children's homes, then it appears to be the right path to influencing their behaviour in a positive way.

**Figure 2** A process model of cognition regulation

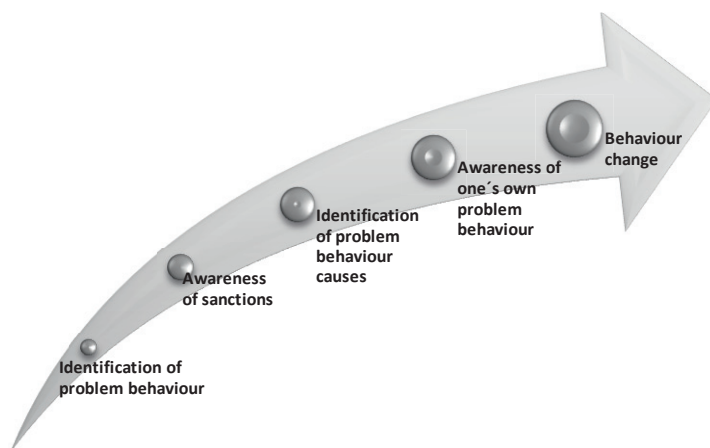
The research also showed that when shaping the life course of children and adolescents in children's homes (including regulating their cognition), the personnel of such facilities (so called supports) play an important role. The staff often becomes external motivating factors by using positive (reward) or negative (ban) sanctions in children and young people. The personality of the worker often substitutes for the personality of the currently absent parent. Therefore, due attention should be paid to the selection of appropriate personnel. An important determinant in plan implementation is undoubtedly the individual level of attention regulation. It can be positively stimulated by internal motivation via success. If children and young people living in residential care experience success, extrinsic motivation changes into intrinsic (Figure 3).

**Figure 3** Cycle model of the influence of intrinsic and extrinsic motivation on success

The significance of support / staff in the lives of children and adolescents living in children's homes does decrease with success gained as the need for reward, praise and support continues. The general problem of the Czech school environment is a dominant effort to replace intrinsic motivation by extrinsic motivation through methods of result verification. Such methods, however, detect only results in the cognitive performance and enable comparisons in which children from children's homes are not able to succeed. Instead of a performance measuring model, a holistic approach should be applied in children and young people in institutional care. Such an approach enables us to see the whole, as not merely the sum of its parts, but something unique and unrepeatable. This is the way to see each and every individual.

Another model that crystallised during the research is the model of four steps leading to the desired change in behaviour (see Figure 4).

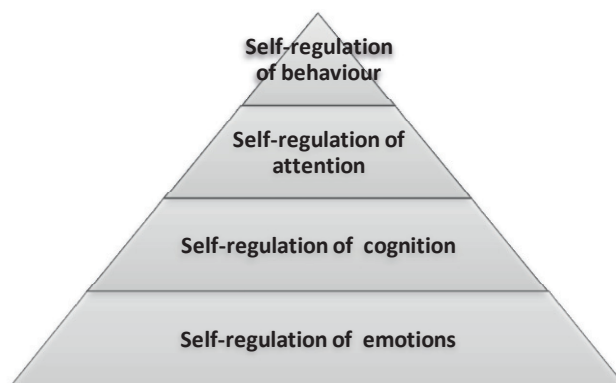


**Figure 4** A model of steps leading to a desired change of behaviour

The model shows that if we are to change an individual's behaviour considered as problematic, we must first identify this in general terms in cooperation with the individual. Only then we can look at the problem behaviour through the prism of sanctions and seek its possible causes. Subsequently, the individual himself/herself must first realise the problematic elements of their behaviour and then we can start initiating the change of behaviour. In accordance with the regulation of emotions, "awareness" is the primary process in the process of behaviour control. Self-regulation of behaviour can thus be simply explained as a controlled change of one's own behaviour on the basis of internal and external determinants.

## 5. Summary

A hierarchical model was established on the basis of uncovering the mechanisms involved and most influencing the process of self-regulation in children and adolescents living in children's homes (see Figure 5). The model indicates that the very "tip of the iceberg" is self-regulation of behaviour. The platform for its development is formed by self-regulation of emotions, followed by self-regulation of cognition and self-regulation of attention. The presented model therefore shows clearly that self-regulation of behaviour cannot be stimulated successfully without the development of the three previous components.

**Figure 5** Hierarchical model of self-regulation according to the regulated areas



In case we wish to develop self-regulation in children and adolescents in children's homes and thus prevent possible problems in their behaviour, we must first and foremost *focus on the development of emotional and social competencies* that are closely related to the development of the rate of self-regulation of their emotions, cognition and attention. As was already stated the three areas constitute the base for self-regulation of behaviour. The rate of self-regulation of behaviour in children and minors in institutional care then serves as an indicator of the degree of its problematicity. Emotions and social skills (regulation of cognition and attention) are reflected in the behaviour of individuals who apply a variety of strategies in interaction with their social environment. However, these strategies may not always be consistent with the general social norms. Self-regulation is then related to the degree of internalisation of social rules that should be supported through the aforementioned process of "consciousness/awareness" in children and adolescents living in children's homes.

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